

Remarks

Further and favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

Thus, claims 1-30 have been replaced by new claims 31-62.

New claim 31 combines the subject matter of original claims 1 and 2, and further requires that the antioxidant is dissolved in the short chain carboxylic acid, attention in this regard being directed to the disclosure at page 2, lines 21-23 of the specification, and also claim 5.

New claims 32-33 correspond to claim 3; new claims 34-35 correspond to claim 4; new claims 36-37 correspond to claim 5; new claims 38-40 correspond to claims 6-8, respectively; new claims 41-42 correspond to claim 9; new claims 43-44 correspond to claim 10; new claims 45-47 correspond to claims 11-13, respectively; new claims 48-49 correspond to claim 17; new claims 50-51 correspond to claim 18; new claims 52-58 correspond to claims 20-22 and 24-27, respectively; new claims 59-60 correspond to claim 28; and new claims 61-62 correspond to claims 29-30, respectively.

In view of the wording of the new claims, Applicants take the position that the rejection of claims 1-30 under the second paragraph of 35 U.S.C. §112, as well as the rejection of claims 12-13 under 35 U.S.C. §101, have been rendered moot.

The patentability of the present invention over the disclosures of the references relied upon by the Examiner in rejecting the claims will be apparent upon consideration of the following remarks.

Initially, Applicants note that the SU 1449095 reference applied by the Examiner in item 7 of the Office Action corresponds to the D1 reference cited in the International Preliminary Examination Report (IPER), a copy of which is of record. The D1 reference, as well as the D2 and D6 references cited in the IPER have not yet been cited on a PTO-892 or PTO-1449 form. [The PTO-1449 form filed September 10, 2001, an Examiner-initialed copy of which is attached to the Office Action, is based on the references cited in the International Search Report, which do not include the D1, D2 and D6 references in the IPER.] Presumably the PTO has received copies of the D1, D2 and D6 references, it again being noted that the Examiner has rejected the claims

based on the D1 reference. In order to make the D1, D2 and D6 references of record, Applicants are submitting herewith a PTO-1449 form citing these references. Also submitted herewith are a copy of the D1 reference and an English translation thereof, as well as copies of abstracts for the D2 and D6 references. The Examiner is kindly requested to initial these three references on the attached PTO-1449 form, and then send Applicants' attorney a copy of the initialed form.

On page 4 of the Office Action, the Examiner indicates that she does not have abstracts or translations for the SE 455754, NO 155273 (correct citation: NO 155723), DK 141922 and Norsk Fiskeoppdrett, Bergen 1976 (1979) references submitted by Applicants. Applicants have been able to obtain an abstract of the SE '754 reference (which corresponds to the NO '723 reference), and an abstract of the DK '922 reference to the extent of its title, and such abstracts are submitted herewith.

SE '754 and NO '723 relate to a process and a preservative for preserving highly aqueous animal feedstuffs, particularly fish silage. The preservative contains one or more organic acids (acetic acid, formic acid), optionally one or more inorganic acids (phosphoric acid), an antioxidant (SE '754) page 17, last paragraph: ethoxyquin, BHT, BHA or TBHQ), a microbiocide (poly(hexamethylenebiguanide)hydrochloride (SE '754 page 16, first paragraph: "Vantocil IB)), and if formic acid is not included, 8-hydroxyquinoline or a salt or a complex thereof is included. The microbiocide is an essential compound in the preservative according to SE '754 and NO '723. In a Regulation from the Norwegian Agricultural Supervision regarding feed products ("Forskrift om Forvarer" from Landbrukstilsynet) "Vantocil IB" is not registered; i.e. it is not approved. The same goes for the Regulations regarding additives to food and fish feed ("Forskrifter om tilsetningsstoffer til nxringsmidler" and "Forskrift om fiskefor"). These Regulations are harmonized with the EU. This means that the preservative according to SE '754 and NO '723 is not applicable in articles of food, which is a main object of the present invention. SE '754 and NO '723 thus do not solve the problem as described in the present application, namely to provide a silage aid comprising a food approved antioxidant.

DK '922 relates to a method for extraction of oil and protein matters from fish or fish intestines and fish liver where BHA or BHT is used as antioxidant together with a mineral acid

(sulphuric acid). These antioxidants have low solubility in mineral acids, as shown in the present application, Table 1, page 3. In the present application an antioxidant is dissolved in carboxylic acids, and in DK '922 inorganic acids are used, and it is not possible to dissolve the antioxidants in such acids.

Norsk Fiskeoppdrett Bergen 1976 - (1979, Vol. 4, No. 1, p. 4 - 7, Austreng et al.) relates to ensiling by addition of different acids (formic acid, acetic acid and sulphuric acid) and in addition also small amounts of antioxidant and sorbic acid are added to the mass to be ensiled. Translation of the last paragraph, column 1, page 5: "The starting material for the storage test was a mixture of trawl fish, essentially whiting (*Merlangus merlangus*, L.). The fish was minced in a feed mill (with 8 mm hole size) and weighed in portions of 15 kg. Each portion was added acids and antioxidant under stirring. The mixtures were transferred to plastic containers of 30 litres with sealed cover." The sentence "Each portion was added acids and antioxidant under stirring" makes it is clear that this article does not relate to a solution of antioxidant in acids; acids and antioxidant are added as separate compounds.

There are several advantages achieved by using a silage aid comprising a solution of antioxidant in acid according to the present application. A correct dosing of the compounds is secured, in relation to one another and in relation to the raw material. The handling is much simpler and it is easier to obtain an even distribution of the compounds in the raw material.

Applicants will now turn to the prior art rejections raised by the Examiner.

The rejection of claims 1-2 and 13 under 35 U.S.C. §102(b) as being anticipated by WO 99/37168 is respectfully traversed.

Applicants take the position that this reference is not available as prior art against the present invention, because it was published July 29, 1999, after the filing date of March 8, 1999 for Applicants' Norwegian priority application. In this regard, Applicants note that the Examiner has not acknowledged receipt of a copy of the certified copy of the priority document from the International Bureau. Considering the copy of Form PCT/IB/304 filed with the application papers upon entering the U.S. National Phase, it seems as though the PTO should have received a copy of the certified copy of the priority application from the International Bureau. In any case,

Applicants are submitting concurrently herewith a Claim of Priority together with a certified copy of the Norwegian priority application, which Applicants note is in the English language.

In consideration of the disclosure of the priority application, Applicants take the position that the WO '168 reference is not available as prior art against the present invention; and for this reason alone the rejection based on this reference should be withdrawn.

The rejection of claims 1-2 and 13 under 35 U.S.C. §102(b) as being anticipated by Talmage et al. (Tribble et al.) is respectfully traversed.

The Examiner states that the (present) claims include citric acid and BHT as a preservative.

However, claim 2 of the present application, which is included among the claims rejected on the basis of the Tribble et al. reference, limits the short chain carboxylic acid to formic acid, acetic acid and/or propionic acid. There is no argument advanced by the Examiner as to why claim 2 is included in the claims rejected on the basis of the Tribble et al. reference, nor is there any mention in this reference of any of the acids in claim 2 of the present application. Applicants take the position that since claim 2 has been incorporated into claim 1, the rejection based on Tribble et al. should be withdrawn.

The rejection of claims 1-2, 6-7, 12-13, 19, 23 and 27 under 35 U.S.C. §102(b) as being anticipated by Lindsay is respectfully traversed.

The Lindsay reference relates to a deodorization process to realize highly polyunsaturated oils of enhanced stability. Step D in claim 1 of the reference describes adding antioxidants to acidified, deodorized oil to form acidified, deodorized, antioxidant loaded oil. That is, the antioxidants are dissolved in the oil, and not in acid as in the present invention. For this reason, Applicants take the position that Lindsay fails to anticipate (or suggest) the presently claimed invention.

The rejection of claims 1-2 and 12-13 under 35 U.S.C. §102(b) as being anticipated by SU 1449095 is respectfully traversed.

As apparent from the English translation of this reference submitted herewith, it relates to a silage preservative containing agidol, orthophosphoric acid and formic acid. The fungicidal and

bactericidal activities of the agidol-containing preservative for feed, and the quality of the feed, is improved by adding orthophosphoric acid and formic acid to the preservative. The compounds of the preservative are: agidol (2,6-di-*tert*-butyl-4-methylphenol (BHT)) 56-60 weight %, formic acid 38-42 weight % and orthophosphoric acid 1.5-2.5 weight %.

However, there is no disclosure (or suggestion) in the SU '095 reference of dissolving the antioxidant in the short chain carboxylic acid, as required in the presently claimed invention.

From Table 1, page 3 of the present application, it can be seen that the solubility of BHT in inorganic acids is < 0.1 weight %, and in formic acid the solubility of BHT is < 0.25 weight %. Thus, it would not be possible to dissolve the high amount of agidol (56 - 60 weight %) of the silage preservative in SU '095 in 38 - 42 weight % of formic acid and 1.5 - 2.5 weight % orthophosphoric acid, i.e. this reference does not relate to a solution. This is different from the present invention where the silage aid is a solution of the antioxidant(s) in at least one short chain carboxylic acid and optionally at least one salt of such acid.

For these reasons, Applicants take the position that the SU '095 reference fails to anticipate (or suggest) the presently claimed invention.

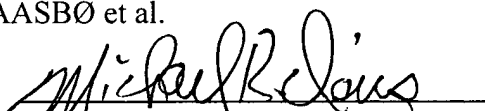
Incidentally, there seems to be a misprint in the International Preliminary Examination Report (IPER), a copy of which is of record in the present application. The IPER indicates that the amount of agidol (BHT) in the silage preservative of the SU '095 reference is 1.5-2.5%. However, as apparent from the translation of the SU '095 reference submitted herewith, more particularly the claims and abstract, the amount of agidol in the silage preservative is 56-60%.

In view of the foregoing amendments and remarks, it is submitted that each of the grounds of rejection set forth by the Examiner has been overcome, and that the application is in condition for allowance. Such allowance is solicited.

Respectfully submitted,

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